SATURDAY, SEPTEMBER 4, 1875.

## ORIGINAL COMMUNICATIONS.

### THE USE OF REVULSIVES IN DISEASES OF THE NERVOUS SYSTEM.

BY ALLAN McLANE HAMILTON, M.D.,

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DR. WEIR MITCHELL, in his very interesting clinical lecture* upon the Value of Rest in Affections of the Nervous System, says, "To be small one moment and large the next is a condition of health for the vessels." We recognize in most of the different neuroses of circulation a departure from this rule, and the treatment of these I especially propose to discuss. In congestion of nerve-matter, the vessels are deprived of their normal property, losing contractility undoubtedly through a paralysis of their vaso-motor fibres, which allow the inhibitory fibres to influence dilatation. The wise provision of nature, perivascular spaces in the brain-substance, first demonstrated by Robin and His, to some degree prevents sudden changes of diameter and consequent pressure of brain-matter; so where there is constant alteration of calibre attendant upon congestive diseases, the absorption and reformation of perivascular fluid must be seriously interfered with and the functional activity of the brain impaired. In the various diseases of the brain and cord dependent upon increase or diminution of blood-supply, the meninges of these organs must be affected to produce changes in the circulatory vessels of the nerve-substance itself. We may accomplish this best by revulsive applications to the back, so that there may be decided impression made upon the sympathetic ganglia and sudden shock to the vessels of the meninges, or by irritation of peripheral ends of spinal nerves, and inhibitory action as a consequence.

Brown-Séquard† recently stated that he had observed, after application of the actual cautery to the skin over the cervical sympathetic ganglion, a marked effect upon the iris, through stimulation of the ciliary filaments. We may, therefore, take for granted that vaso-motor filaments of other parts are influenced as well. The repeated transmission of reflex impression or sensation of a healthy character should be followed by a beneficial change in the nerve-substance. We observe in peripheral neuralgia that if irritation be made between the point of morbid sensation and the nerve-centre, the disease will be cured through a change in the character of the abnormal sensation sent from the periphery.

We are enabled to put this principle in play when pain results from disordered central action, such, for instance, as spinal irritation dependent upon anæmia. The revulsive action of certain agents will change the character of the trouble by first transmitting a reflex impression, or, second, altering the circulation, through changes in the contractility of the arterioles.

Brown-Séquard‡ has shown the striking results following the use of revulsives in diseases dependent upon loss of trophic function, more particularly the wonderful reparative process that follows the alternate application of heat and cold to bed-sores. This condition is eminently a neurosis, and the results of this form of treatment must clearly justify the conclusion.

For the production of the revulsive effect, we must bear in mind the important fact that application of the agent must be sudden and superficial. By observing these conditions we produce what is necessarily a shock.

Two forms of application which I consider of great value are, first, the actual cautery; second, the alternation of heat and cold. The use of the first in my hands during the past year has convinced me that for certain neuralgias no better remedy exists. Not only has it broken up attacks, but it has also most certainly brought about central changes resulting in healthy action of those parts.

Dr. William H. Thompson§ prefers the glass rod heated instead of the white-hot iron; and for convenience, perhaps, it is the better of the two. As far back as 1823 it was employed by Van der Kolk in epilepsy, with decided success; but he used it to produce a lasting ulcer, and not as an agent for obtaining a sudden and superficial irritation: nevertheless, he reports several cases, six in all, that were greatly relieved, and one cured entirely.

Delpech recommended the actual cautery for neuralgia, but kept up a running sore.

The late Dr. Anstie‖ seems to have been the first person who used the cautery-iron with a proper idea of its effects; and he abandoned the theory that it acted only as a counter-irritant. Anstie's opinion of its action, which is undoubtedly the correct one, is based upon the fact that the impression interrupts the conductivity of the nerve which is between the point of disease and the centre. Consequently, what I have said before about its being applied (not at the seat of pain, but between its focus and the nerve-centre) is the rational method.

I have often watched the truth of this in cases of facial neuralgia dependent upon carious teeth, sometimes by destroying the character of the morbid irritation, and supplanting it by the actual cautery impression; we may then have a new sensation transmitted to the sensory centre which is beneficial. In those cases of neuralgia where there are hyperæsthetic points, the actual cautery holds out a very good chance of relief. In epilepsy, when an *aura* precedes the attack, the burning of a part of the skin between the point from which it starts and the nerve-centre will abort subsequent seizures.

Much depends upon the temperature of the iron. It is absolutely necessary that it should be brought to a white heat. A red-hot iron will produce deep

* Rest in Nervous Diseases, Am. Clin. Lectures, p. 86.
† Boston Medical and Surgical Journal, July 31, 1875.
‡ Central Nervous System, p. 261.
§ On the Treatment of Sciatica, Am. Clin. Lec., p. 110.
‖ Neuralgia, etc., p. 286.

action, and will destroy tissue by subsequent ulceration; the same results will follow the *slow passage* of the iron over the surface. The cautery-iron should invariably be white-hot: it should be drawn rapidly over the skin, and the result will be almost painless. The surface will be slightly discolored, and that is all, as the action is confined to the cuticle, which shrivels up and falls off in a few days. There has been a tendency of late to use the cautery-iron in convulsive affections, and it has been my privilege to see several patients who have gone through this ordeal without any benefit whatever, and have had their troubles aggravated by the nervous apprehension and dread associated with the white iron. As I have said before, the neuralgias are the neuroses that call for its use. I may relate the following case, which will illustrate the efficiency of superficial cauterization for sciatica:

Mr. F., twelve years ago, when a clerk, was obliged to sleep in the damp bedroom of a warehouse near the river. He then contracted a "cold" with attendant "rheumatism," and a condition was left which was unmistakably sciatica.

He consulted several medical men, among them one in this city, who suggested a blister. This acted beneficially, and the disease disappeared almost entirely. With every change of the weather, however, he had some reminders of the malady, and finally, in the spring of 1874, he was prostrated, and took to his bed. When I examined him I found marked atrophy of the affected leg, some anæsthesia, and marked contraction. Galvanism, deep hypodermic injections, and various counter-irritants, combined with constitutional treatment, had failed to do him good or abate the symptoms. I then directed his attending physician to use the cautery-iron. In three weeks he was up, and is now free from pain. The applications were made as soon as the previous burns were healed. Not only here does it act as a revulsive, but it unmistakably removes exudations that may press upon the nerve-sheath.

I have spoken of the uses of heat and cold for the relief of certain neuroses associated with trophic and circulatory defects. It remains for me to prove the efficacy of this treatment by the relation of experience; but first I wish to refer to the results of experiments by Chapman and others. We may tabulate them as follows:

COLD TO SPINE.

| *Physiological Action.* | *Therapeutical Indication.* |
|---|---|
| Muscular tension is lowered. | Overcoming the convulsive contraction due to acute or chronic central neurosis. |
| Sensibility is lowered. | Relief of neuralgias. |
| Peripheral circulation increased. | Morbid conditions of sensibility associated with hemiplegia relieved. |

HEAT TO SPINE.

| *Physiological Action.* | *Therapeutical Indication.* |
|---|---|
| Increased activity and function of sympathetic ganglia and contraction of vessels. | Subsidence of inflammatory condition of nervous centres. |

A consideration of the effects of both of these agents enables us to see that an alternate application of either would produce a sudden and beneficial change of tone, thus illustrating the words of Dr. Mitchell before quoted.

Every neurologist is overrun by a class of patients that constitute a certain *opprobrium medicorum*. These are patients with dysæsthesiæ, spinal irritation, and a few other maladies, confined chiefly to women, and dependent upon uterine diseases. After the employment of many remedies, and after finding hopeless results, constituted either by relapses or temporary improvement, the case is discharged. In these cases I found the alternate use of heat and cold to be followed by the most desirable effects, particularly in spinal irritation. Of twenty-six cases of this kind I have cured fifteen, and have greatly improved all the others. I had used phosphorus and electricity with indifferent success, but the alternate application of heat and cold to the spine produced a decided impression. I at first directed the patients to employ ice-bags, and hot flat-irons covered by flannel, but subsequently made use of the instrument I will presently describe. In hysterical affections this mode of treatment was of great use, particularly those forms characterized by lividity of the surface and unconsciousness, with rigidity. The surface became warmer and the circulation much more equable after ten or fifteen minutes' use of the revulsor. I wish to give examples of this form of treatment.

*Case I.*—Patient married eight years; no children; complains of headache of anæmic variety, somnolency, inattention, loss of memory, and mental incapacity; very pale and thin, pain in back. A previous physician found uterine trouble, which was removed. Pyrophosphate of iron, strychnia, and hot and cold applications; benefit in two weeks, and cure in three months.

*Case II.*—Patient at present under treatment. After an acute attack of sickness (probably typhoid fever), convalescence began; some pain in the back, and tenderness on pressure; feebleness and indisposition to take exercise, tight constriction of waist, headache; somnolency continued through the forenoon; very difficult to arouse. The husband of this patient is obliged to throw cold water in her face before she will awake. Great inability to fix attention upon anything. It was impossible for her to read. Dr. Loring examined her eyes, and found paleness of optic disks. Under a systematic use of the revulsor during the first three months, these symptoms have one by one disappeared, till but few are left. Three weeks after treatment, she could read, and the headache had gone. Sleep is much better, as it does not extend over a natural period. She was in a very curious condition at night. Between the hours of eight and eleven she seemed to be very wide-awake and vivacious, but during the early part of the day she was stupid and heavy.

Other cases I might present, and would prove that the action of heat and cold begins at once, and that early recovery is to be expected. For the application of these agents I have devised the instrument figured in the cut. It consists of two chambers

of brass three inches in diameter by one and a half inches deep. These have screw-plugs inserted so that they may be removed and the chambers filled, one with cold water and salt, the other with hot water. These chambers are fixed on a rod, and separated by an insulating or non-conducting substance. The rod terminates in a handle. The flat surface covered by thin flannel is placed against the bare back, on either side of the spinous processes of the vertebræ, and the instrument is passed up and down quite rapidly. As the heated surface moves instantaneously to where the cold one was an instant before, the effect is quite marked.

Dry heat and dry cold are much better as therapeutical agents than moist heat or moist cold. The effect is energetic; the skin is influenced more quickly, as there is no fluid between to act as a non-conductor. Dr. William H. Thompson, of New York, to whom I have shown this instrument, has expressed his ideas very strongly upon this point.

A consideration of the action of other revulsive agents would take many pages. I must say a word, however, of the virtues of the localized ether-spray to the spine. I can conceive of no better treatment for chorea and other convulsive disorders. I have witnessed its effects even in convulsive disease of adults. Shaking palsy, and the tremor of alcohol and sclerosis, may be moderated. It is safe to say that fifteen or twenty applications of the spray in most cases of chorea will effect a cure. I have tested it alone and with other remedies, and in several cases it cured the disease without adjuvant treatment.

In paralytic conditions, local application of the revulsor to the muscles themselves seemed to increase the circulation in the tissues much more vigorously and successfully than did the faradic current. Dr. G. M. Beard, of New York, a year or so ago exhibited at one of the meetings of the Academy of Medicine an apparatus for applying hot air to a paralyzed limb in hemiplegia. It consists of an earthen pipe (Dr. B. demonstrated his remarks by a common earthen drain-pipe) heated to a moderate degree: this was placed about the paralyzed member. His results were good. Heat and cold I am convinced are valuable remedies that have not been thoroughly made use of.

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## MEMBRANOUS CROUP: TWO REMARKABLE CASES,

*SHOWING THE EFFICIENCY OF MEDICINAL AGENTS BOTH IN THE CURE AND ARREST OF THE MALADY.*

BY J. J. MAGUIGAN, M.D.

THE subject of the first case is a male child, two and a half years of age, whom I saw at 8 P.M., twenty-four hours after the onset of the disease. He presented that assemblage of phenomena so characteristic of laryngeal obstruction,—namely, contraction of the lower part of the chest, with sinking in of the soft parts above the clavicles and the sternum in the act of inspiration, which was slow, laborious, and stridulous; the voice was husky; the facial expression wild, anxious, and appealing; pulse 130, and fever pretty high. There were no exudation-patches on the fauces. Spasm was a prominent and aggravating factor in the dyspnœa.

Coxe's hive syrup having been administered without effect, I ordered a heaping teaspoonful of alum, dissolved in sweetened water, which provoked emesis. This eased up his symptoms to a degree by subduing the spasmodic element against which it was directed.

At 10.30 P.M., two hours later, I returned, and found that he had steadily grown worse, there being now an exaggeration of all the portentous phenomena aforementioned, and higher fever. I again administered an emetic of alum, and then ordered nauseating doses of ipecac, ʒi, to be repeated every hour, with large mush-poultices to the neck, and further directed that about two o'clock another emetic should be given.

About five o'clock of the morning I was again summoned to the child. He had now reached the very climax of his suffering, and was in the jaws of death. He lay on his side, with his head violently retracted, stretching the trachea to its utmost limits in a superhuman effort to carry on respiration. I heard for the first time a soft, shifting rhonchus in the larynx.

I cleared the fauces of a quantity of mucus and blood by provoking reflex action in the part with the handle of a spoon, and then gave an emetic of thirty grains of the sulphate of zinc. The vomit contained mucus and blood, broken bits and flakes of white membrane, and one large fragment an inch in length and several lines in breadth.

Considerable relief, of course, followed the expulsion of these matters, but the relief was relative, not absolute; the symptoms were still alarming, and it was manifest that the great bulk of the membrane, nearly all, in fact, remained firmly adherent in the throat, though a feeble flapping sound—the *tremblotement* of the French—could be heard in the larynx on inspiration.

With a view to the speedy softening and detachment of the membrane, I placed under the nostrils of the child a cup of slaking lime, a practice strongly recommended in the text-books and in the didactic lectures of the course. The experiment, in my hands, was unsuccessful and unfortunate. In the first trial the fumes arising from the lime nearly suffocated the child: he tossed his head wildly about in search of a breath of pure air. In the second trial, and even in the third, the dyspnœa was equally aggravated.

I then directed the atmosphere of the room to be charged with vapor-steam generated from a caldron of boiling water placed over the fire. The apartment was a contracted one, 10 by 14, and was constantly occupied by at least three or four of the

sympathizing friends of the family. In an hour afterwards, on my return, I found the air saturated with moisture, but the child was worse, his face flushed, wild, and excited, and the dyspnœa frightful. I instinctively opened the doors and windows, letting the fresh air in or the bad air out, to the manifest relief not only of the child, but also of the other panting inmates of the apartment.

These methods proving unavailing or inapplicable, I next tried a *hand-ball atomizer*, the kind used for perfuming handkerchiefs, and, filling it with lime-water, I played a beautiful spray into the fauces and larynx for at least five minutes. For the first time my efforts seemed to have met with a favorable response. In an easy manner this instrument accomplished the conjoint objects sought to be attained by the other two methods,—viz., the application to the larynx of moisture and a substance capable of acting chemically upon the membrane and dissolving it. The lime-water, which was the officinal solution, was used cold. The spray was employed half-hourly for the next twelve hours, and then hourly until convalescence was declared. The relief which it afforded, as indicated by the diminished dyspnœa, was always prompt and decided, particularly after the first few applications, when the membrane began to evince signs of rapid disintegration. The cough became less sonorous and more moist, and the expectoration free, the hawked-up matter being swallowed almost invariably. On the morning of the fifth day the larynx was entirely free. Respiration was entirely unimpeded, yet rough and croupal; the voice also remained husky, and a constant, short, laryngeal cough tortured him for the next twenty-four hours, for the relief of which a mixture of hydrate of chloral, tinct. opii, and ipecac was given. A simple catarrhal cough remained for two weeks or more.

So much with regard to the membrane, the expulsion of which may be considered the *sine qua non* to recovery; but scarcely less inimical to the life of the patient in this case was the superadded spasm. This element, though it played a subordinate rôle, would have determined the death of the patient but for the energetic manner in which its influence was combated by emetics and nauseants. By it all the frightful paroxysms of dyspnœa were superinduced. The most violent of these paroxysms, as well as a general exacerbation of the disease, invariably occurred at night on the second, third, fourth, and even the fifth night, the attack setting in at nightfall and subsiding at dawn of day. This nocturnal exacerbation and the prominence of the spasmodic element are two phenomena in the clinical history of this affection which have been fully portrayed by Jenner in his recent clinical lecture on true croup (*Medical News* for April, taken from the *Lancet* of January 16).

Throughout the treatment the child's vital powers were sustained by administering its aliment to it during the intervals of comparative quietude.

The subject of the second case was a baby eight months old, to whose condition my attention was called on the third day of my attendance on the first case by hearing from it a faint croupal cough.

An examination revealed considerable redness of the fauces, with patches of exudation on the tonsils and posterior wall of the pharynx. This, it will be observed, was an anatomical departure from the other in the incidence of the attack.

The teachings of Trousseau have always had for me a peculiar charm. I took up a stick whose end was wrapped with a bit of cotton, and, charging it heavily with powdered alum, I swept the fauces. In two hours after I threw into the pharynx with the atomizer a spray of a ten-grain solution of sulphate of copper. The baby shortly after vomited. The appearance before noticed vanished within twelve hours, excepting a slight erythema of the mucous membrane. A croupal cough with huskiness of the voice remained for three or four days.

Now let us return for a moment to the treatment, and see whether, in the rapid exfoliation of the membrane observed in the first case, the lime-water was not the principal agent. In a disease which presents such a frightful mortality of nineteen deaths out of every twenty-two cases (Dr. Ware's statistics, given by Flint), it would be absurd to ascribe the whole result to an inherent tendency. But it may be said that nature took the initiative, and already began the work of resolution. In this, however, she did no more than she always does, *i.e.*, commence an operation which she is unable to complete; in the vast majority of cases death does not occur until as late as the fifth or sixth day, when the process of resolution has advanced as far, at least, as was observed in this case. I do not question the influence of the pathological turn-point on the success of the treatment in so far as it had weakened the vitality of the membrane and opened it up to the solvent action of the lime-water.

Lime-water is an active chemical solvent of pseudo-membrane. "We have frequently found," say Meigs and Pepper in their magnificent treatise on Diseases of Children, "when fragments of firm white exudation have been placed in lime-water at a temperature even lower than that of the buccal cavity, that the exterior began in a very short time (half an hour) to undergo disintegration, and that the whole fragment was reduced in a few hours to a granular putrilage." Oertel, describing the same process upon the toughest and most solid membranes he could find, says, "After the lapse of not more than fifteen or twenty minutes, particles of greater or less size gradually separated from the membranes, and after from thirty to forty-five minutes they are completely broken down, and, with a slight agitation of the test-tube, dissolved into a turbid, flocculent fluid" (Vol. I. Cyclopædia of the Practice of Medicine, edited by Ziemssen).

Respecting the second case, the influence of treatment was no less striking and palpable, assuming, as we are obliged to do, that the case would have developed into croup, or an extension of the exudation into the larynx.

I append to this report the history of the following case, which just at this moment has passed out of my hands, as an admirable commentary upon some of the views therein expressed, and the value of the lime-water treatment. The subject was a

little girl, A. C., two years and a half old. When I saw her, there were patches of exudation over the tonsils and pharynx, and she had those objective symptoms of laryngeal obstruction described in the first case, but less severe.

I instituted the same line of treatment given in the first case, but, owing to the obstinacy and perversity of the child, and the want of control over her by her parents, the spray could not be employed. The treatment in every other respect was precisely identical with that given in the first case, viz., emetics and nauseants. *Resolution had feebly commenced on the third day.* The child died at 11½ P.M. of the fifth day.

1241 NORTH SEVENTEENTH STREET, May 14, 1875.

## NOTES OF HOSPITAL PRACTICE.

### HOSPITAL OF THE UNIVERSITY OF PENNSYLVANIA.

*SERVICE OF PROF. D. HAYES AGNEW, M.D.*

Reported by WM. M. MASTIN, M.D., Resident Surgeon.

*ANEURISM OF THE EXTERNAL ILIAC ARTERY—COMPRESSION—CURE.*

THE subject of these notes is an active, robust laboring-man, about 48 years of age, and of intemperate habits. He states that he was born in Ireland, of healthy parents, and came to this country some fifteen years ago. His own health has always been perfect, allowing him to follow constantly his occupation—that of a ditch-digger—up to the time of his present disease.

About nine months since, while making a short journey on foot, he tripped and fell, sustaining a slight sprain of the right ankle-joint. This was soon followed by swelling and pain, extending up the inner side of the thigh to the pelvis, with a perceptible limp in his gait. However, with the exception of these erratic pains, which have continued ever since, there was no evidence of any other injury until four months later, when he noticed a pulsation in the right groin, and, on closer inspection, discovered a small tumor about the size of a chestnut.

His medical adviser, whom he at this time consulted, directed perfect rest, with elevation of the limb; but, notwithstanding the strict observance of these measures, the pulsation grew more forcible, and the tumor gradually increased in size until it has attained its present dimensions. With this history he was received into the surgical wards of the University Hospital, May 14, 1875.

At the time of his admission, inspection reveals a distinct but rather diffused swelling of the right groin, with a slight sulcus or groove obliquely crossing it a little below its middle, corresponding to Poupart's ligament; the tumor has an expanding or heaving movement. What appears to be a diffused swelling is found by palpation to be a circumscribed tumor, elastic and compressible, with tolerably thick walls, and having a pulsation synchronous with the action of the heart. This tumor is about four and a half inches in length. Taking Poupart's ligament as a line, it extends from a point two and a half inches above the middle of that ligament to two inches below it. Laterally, the diameter is almost the same: the tumor reaching from half an inch to the inner side of the anterior superior spinous process of the ilium to very near the mesial line.

On placing the ear over the tumor, the characteristic bellows-sound or aneurismal bruit is plainly heard. This murmur extends for a short distance into the sound portion of the femoral artery.

Cutting off the supply of blood to the part by compressing the abdominal aorta, or thrusting the primitive iliac back against the brim of the pelvis, stops the pulsation, making the tumor subside in a measure and grow sensibly smaller. No disease of the heart or large arteries can be detected by careful auscultation; but, on examining the pulse on the two sides, the right radial artery is found to be extensively atheromatous, feeling like a stony mass beneath the finger.

Remembering the man's occupation, and the habit these men have of using the long-handled spade for their work and making the upper part of the thigh act as a fulcrum upon which the handle of the spade rests in throwing up the earth, I find the tumor occupies about this position, and, perhaps, may have been caused by this pressure and strain on the already diseased artery.

In view of this diseased condition of the man's arterial system, compression of the artery was decided upon as giving the best chance of cure. Accordingly, as a preparation for this procedure, he was placed on light diet, and the leg elevated on an inclined plane, with directions to have the bowels thoroughly emptied.

May 17.—At 7.05 P.M., pressure was begun by an abdominal tourniquet, the pad of which compressed the common iliac. The man stood the pressure until 10.45 P.M., when the pain was so great as to necessitate the administration of ether. Under the influence of this anæsthetic, compression was continued one hour and fifteen minutes longer, when the tourniquet was removed. After the removal of the tourniquet the pulsation was found to be somewhat lessened, and the walls of the tumor thickened, firmer, and less elastic. Patient complained of tension and stiffness in the groin. Elevated the leg, and quiet enjoined.

May 20.—Pulsation and general condition of tumor remained unchanged.

May 22.—Compression again commenced. 2.45 P M., artery completely occluded. Pain required the early administration of ether. 6.45 P.M., pressure let up for a moment, and pulsation found to be much lessened. Temperature of leg tolerably good, but enveloped it in cotton batting. 2.45 A.M., tourniquet removed entirely. Pulsation still more diminished. Tumor continued to grow hard and more resisting. Temperature of leg remained good. Patient eleven hours and forty-five minutes under influence of ether.

May 26.—Consistence and impulse of tumor remained unchanged, but tumor seemed to be growing larger, as it had encroached on median line. The iliac was more involved.

May 29.—Put patient under ether and compressed abdominal aorta, cutting off blood from both extremities for one hour and ten minutes. After the hour the tumor seemed almost solid and impulse scarcely discernible.

May 30.—Compressed abdominal aorta for a short time, at the expiration of which, impulse in tumor had entirely ceased, and tumor perfectly solid and firm. No pulsation in femoral. Temperature of limb excellent. Continued with warmth to and elevation of the limb.

June 2.—Tumor remained a hard, solid body. Pulsation returned in popliteal artery. Patient in an excellent condition.

June 6.—Patient discharged cured.

A PROPHYLACTIC FOR SORE NIPPLES (*The Medical Record*, August 21, 1875).—Dr. Julius Fehr recommends the local use of tannate of lead and glycerin, two or three times daily for about one month before parturition, as a reliable preventive of sore nipples.

## TRANSLATIONS.

PENETRATING WOUND OF THE CHEST—RECOVERY (*Le Mouvement Médical*, August 7, 1875).—M. Hervieux reports the case of a young man who, with the intention of committing suicide, stabbed himself with a knife in the fourth intercostal space immediately above the upper edge of the fifth rib, one and a half centimetres below the left nipple and eight centimetres from the left border of the sternum. The blade penetrated the thoracic cavity to the depth of nine centimetres. When first seen, he was covered with blood, the clots, which were then hastily removed, weighing between two and three pounds. The wound was quickly cleaned, three pins were passed from one side to the other, and it was then accurately brought together by a twisted suture, thus arresting all external hemorrhage. In a few moments, however, a thrombus the size of a hen's egg formed at the external angle of the wound, and outside of this and below it there was developed an elastic and tympanitic tumor, which was about as large as two fists, and was due to subcutaneous emphysema. These, however, remained stationary. The pulse was then only eighty-four a minute, but was soft, feeble, compressible, intermittent, and irregular. Respiration was high and frequent, and each inspiration was accompanied by a sharp pain at the bottom of the wound. His face was pale, almost exsanguine. He had neither cough nor bloody expectoration. Cold compresses were applied over the wound, followed later in the night by poultices of flaxseed meal. The following day the emphysema had disappeared; the thrombus still persisted; there were fever and dyspnœa. On auscultation nothing abnormal was found on the affected side. On the fourth day the pins were withdrawn, and the wound was found to have united by first intention. His convalescence was uninterrupted, and in three weeks he was entirely well. M. Hervieux concludes that the heart had just escaped being wounded, but that the knife must undoubtedly have reached the lung, although the thickness of the left side of the heart separating the lung from the anterior wall of the chest probably caused the wound to be of but slight depth. He admits the absence of a certain number of positive signs which we are accustomed to associate with a pulmonary wound, but refers to several cases in which the diagnosis was beyond question, and in which, as in this one, there was neither cough, bloody expectoration, pneumonia, nor pneumothorax, and recovery was equally speedy and uninterrupted. J. W. W.

URÆMIA IN CANCER OF THE UTERUS (*Le Progrès Médical*, July 24, 1875).—M. Raymond reports the case of a woman, æt. 50 years, who died of cancer of the uterus. During the last four days of her life she urinated with difficulty, and had a profuse diarrhœa; coma had preceded death for forty-eight hours. At the autopsy the right ureter was found to be compressed by the uterine cancer. The kidney of the same side was much atrophied in its substance proper, but its pelvis was considerably enlarged. The two ureters were large, and contained a clear citron-yellow watery fluid, which on analysis was found to be composed of water .977, urea 3.85, albumen 7.60, alkaline chlorides 6.10, phosphates, sulphates, etc., 5.45. The experiments of Hermann demonstrate that the proportion of urea in the urine diminishes relatively to the volume of the latter when pressure is made on the ureters, and when this pressure is equal to that of sixty millimetres of mercury the urea disappears altogether. It is easily understood, then, why women suffering from cancer of the uterus still pass a normal quantity of urine, which, however, is only water, when there is incomplete compression of the ureters, and why also they die of uræmia. These facts have been verified in several cases at the Salpétrière. J. W. W.

SALIVARY CALCULUS THE CAUSE OF AN INFLAMMATION OF THE VELUM PALATI AND THE BASE OF THE TONGUE (*Le Progrès Médical*, July 10, 1875).—M. Gouguenheim reports the case of a man æt. 35, subject to winter cough, but presenting neither the rational nor the physical signs of tuberculosis. He complained of a pain in the throat, at first slight, but becoming more and more intense. There was a slight redness of the soft palate and its arches, but no change in consistence could be recognized by the touch. The pain became more severe whenever, during the examination, the base of the tongue was depressed. He was tormented by incessant movements of deglutition, and complained of a continual spasmodic sensation in the throat. At the end of four days the pains, which were growing intolerable, suddenly ceased, after the evacuation of an elongated cylindrical concretion, a little more than a centimetre in length. It was of a dirty-yellow color, and was formed of a number of layers of organic and inorganic matter disposed in a concentric manner. It was found on examination to be a salivary calculus, and had probably been lodged above the aryteno-epiglottidean folds or behind the greater cornu of the hyoid bone. J. W. W.

HEPATITIS (*Le Progrès Médical*, July 24, 1875).—M. Cornil has had the opportunity of studying the livers of patients who had died from a parenchymatous hepatitis occurring in the course of such diseases as leucocythæmia, typhoid fever, smallpox, etc. He has found in these cases a lesion analogous to that which he had already pointed out in certain cases of cirrhosis. The smaller intralobular biliary canaliculi were filled with epithelial cells, placed end to end, and which finally obliterated them. As these alterations are especially marked in the smallest peripheral canals, it is evident that the bile produced in the central canals cannot escape if the lesion is much advanced. The mode of production of the jaundice is thus explained: it is due to the disease of these canaliculi, and not to obliteration of the large biliary ducts, as generally believed. J. W. W.

CYSTIC ENLARGEMENT OF THE APPENDIX VERMIFORMIS (Dr. Wenzel Gruber: *Virchow's Archiv*, lxiii.).—In a series of cases of cystic enlargement of the processus vermicularis, the following, which was found in the body of a man who died of tuberculous disease of the lungs and intestines, is deemed worthy of notice.

The process at its lower portion was distended into a round sac with thick walls, while its upper portion had been transformed into a thick pedicle, through which there was a canal of small calibre. At its attachment to the cœcum it had been converted into a short tube of large size but with thin walls, and which represented the neck of the tumor, being connected below with the sac and above with the cœcum and the canal in the pedicle. The sac contained a quantity of stringy compact mucus, which tightly distended it.

The larger part of the ring-shaped opening of the sac was joined to the omentum majus by adhesions, but there were no connections between the tumor and the peritoneum lining the upper part of the iliac fossa. The orifice between the gut and the appendix must have been of small size before any pathological changes took place, but had perhaps been rendered much smaller by the chronic inflammatory processes accompanying the tuberculous ulceration which had been taking place. W. A.

PHILADELPHIA

MEDICAL TIMES.

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## EDITORIAL.

### A NEW HAPPY FAMILY.

THE establishment of a homœopathic hospital in New York has given a good-natured contemporary the opportunity of congratulating thereupon the followers of Hahnemann, the practitioners of opposing schools of medicine, and the public at large, and, like Mark Tapley, of "coming out strong" under rather unfavorable circumstances. It bases its cheerfulness in the matter upon the doctrine of the survival of the fittest, holding that if homœopathy is what we believe it to be, it will certainly be annihilated in the professional struggle for existence, and all the sooner for being brought into greater prominence and more active competition. We heartily coincide with these views, which are doubtless correct; but when it also looks forward hopefully to the appointment in connection with the same institution of a sort of supervisory or consulting board, to be composed of regular practitioners, who are to make the diagnoses, and, when the issue happens to be a disastrous one, are to verify them by "autopsical examination," we cannot share its sanguine anticipations. The adoption of the proposed plan would leave our homœopathic brethren sandwiched, as it were, between two layers of what they would term "allopathy," with merely the privilege of administering their attenuations and observing their effects or the absence of them; while, on the other hand, the consultant or diagnostician would frequently have to stand aloof and witness what would be, according to his views, the needless sacrifice of human life, with the unpleasant feeling of being morally, if not legally, *particeps criminis*. We can imagine one of our venerable professors, a believer in counter-irritation, revulsion, and venesection, having, for example, made a diagnosis of congestive hyperæmia of the brain, threatening apoplexy, in a plethoric subject, modestly retiring into the background while his infinitesimal brother steps forward, consults his list of symptoms, and administers the hundred-thousandth dilution or trituration of what he conceives to be the appropriate remedy, after which, according to the "contemplated" programme, the patient would probably pass again into the hands of the "old school."

It seems somewhat unjust to exclude the other medical sects from the benefits of this new co-operative association, and we would suggest resigning the "autopsical" department to the Thomsonians, allowing the eclectics to sign the death-certificates, and requesting the "medical electricians," "cancer-doctors," and "herbalists" to attend the funerals in a body. The female doctors would have to be assigned to some department of importance and responsibility, or the managers would be overwhelmed with petitions and memorials. The "practical physicians," the "healing mediums," the "seventh sons of seventh sons," the "pow-wows," *et id genus omne*, whose services could probably be secured, and with equal propriety and judgment, would still remain to be provided for. Then would come to pass the saying which is written, "The wolf also shall dwell with the lamb, and the leopard shall lie down with the kid; and the calf and the young lion and the fatling together."

It must be understood, however, that the first-mentioned scheme of a board to make diagnoses and autopsies is not merely visionary or hypothetical, for we are told that "a plan having such an end in view is already under contemplation by the Commissioners of Charities and Correction," who, we believe, will be the managers of the new hospital.

We fear the commissioners will have to "contemplate" for an indefinite period before they find, even among the homœopaths, the necessary ignorance and imbecility upon which to base such an arrangement, and we feel sure they would encounter a still greater difficulty in persuading reputable physicians or surgeons to serve upon the diagnostic and "autopsical" board.

Seriously, although we do not view the acquisition of this new institution by the homœopaths as of any importance to the medical or scientific world, and believe it to be predestined to the obscure fate

of its predecessors in other cities, yet there is one aspect in which the matter assumes a gloomy significance. When we remember the intellectual status of the men to whose care, under its auspices, human lives will be confided, and when we recall the list recently published in one of our daily papers, of cases neglected and maltreated at a similar institution in this city, we cannot but feel that the experiment is almost too costly.

We can see no more reason why a homœopathic practitioner should be allowed the opportunity of demonstrating his lack of common sense at the cost of suffering humanity than why any of those more generally recognized as quacks should be allowed the same privilege; and our contemporary's suggestion that we should "combat error on the common ground of reason and the broad platform of enlightened liberality" applies with equal force to all who practise by an exclusive dogma.

## LEADING ARTICLES.

### THE INFLUENCE OF THE LOWER ORGANISMS IN THE PRODUCTION OF INFECTIOUS AND CONTAGIOUS DISEASES.

II.

HAVING in the earlier portion of this article given some account of bacteria in general, it now remains to follow up, so far as possible, the progress of investigation as regards the influence of these organisms on disease, and to examine the present state of our knowledge concerning this influence.

In doing this we shall take up in the first place the subjects of pyæmia and septicæmia, since it was in regard to the occurrence of the lower organisms in these conditions that the earlier investigations of their action were made.

The frequency and gravity of septic complications of wounds have made their etiology, pathology, and treatment one of the most important and interesting of all surgical problems, and the scanty success which has thus far attended all prophylactic and remedial measures shows that the problem in part, at least, is still unsolved.

The intimate connection between putrefactive processes and the group of symptoms called septicæmia has been regarded as established since the celebrated experiments of Gaspard.* Their cause was at first supposed to lie in the absorption of the pus of the wound through the open mouths of the several vessels; then in poisoning of the blood by pus formed in the interior of the vessels by phlebitis. Piorry about 1835 gave a full and accurate account of those symptoms to which he afterwards gave the name septicæmia, by which they have since been known. He ascribed the disease solely to the effects of the absorption of putrid matter through the lungs, skin, intestine, or the surface of a wound, but did not attempt to discover the source of its virulence.

Panum, in 1856, spoke of a non-volatile septic poison which is insoluble in absolute alcohol, soluble in water, and not destroyed by prolonged boiling. Robin considered the virulence due to a catalytic effect produced upon the humors and tissues of the body by contact with a substance in which putrefaction had brought about an isomeric change in the fundamental "immediate principle." He said, "Putridity is not virulence; on the contrary, when it has advanced to a certain degree it destroys virulence;" a statement now universally accepted. Bergman also took the same view, believing the toxic action of putrid substances to be due, not to inferior organisms, but to a diffusible nitrogenized toxic substance resisting alcohol, ether, and boiling heat, and formed during putrefaction.

While thus certain investigators examined the causes of pyæmia and septicæmia from this point of view, others were not wanting who continued to maintain the bacterial origin of disease, and their views were supported by very numerous and varied experiments, to some of which allusion will now be made.

Mayrhofer (1863) claimed that puerperal fever was due to low organisms, which he called vibriones. He observed that they appear in the lochia of healthy lying-in women in small quantities on the fifth day after delivery, but in those attacked by puerperal fever, immediately after delivery, and in large quantities. Injecting a putrid infusion of meat into the uterus of a rabbit soon after delivery, its death resulted from endometritis with septicæmic symptoms.

Leplat and Jallard made inoculations with putrefying animal and vegetable infusions containing vibriones without causing septicæmic results. They hence concluded that vibriones coming from putrefying animal and vegetable substances cause no accidents when injected unless accompanied by virulent agents, which latter are alone responsible for any unfortunate results that may ensue.

The experiments of Coze and Feltz (1865), they asserted, proved that the blood of animals inoculated with putrefying fluids is itself infectious, that it contains bacteria, and that the infectious ferment gains in force by its passage through the organism. They claimed also that the organisms found in the blood are the active efficient agents in the poisoning, and they agreed with Pasteur in saying that there are two phases of putrefaction, of which only the first would cause poisonous symptoms. Hence putrefaction destroys virulence.

In 1869–72, Davaine, investigating anthrax (malignant pustule), discovered bacteridia in the blood of patients. In a report upon inoculations with putrid blood, Davaine confirmed the experience of Coze and Feltz in regard to the gain of virulence by repeated transmissions, and also the destruction of the septicæmic virus by putrefaction. Davaine's experiments received much attention, and at first his conclusions were distrusted;

* Jour. de Phys., par Magendie. T. i. p. 1, 1822, and T. iv. p. 1, 1824.

but, having been substantially confirmed by other investigators, the following points were generally conceded. 1. Susceptibility to the virus varies in different animals. 2. Putrid blood loses its virulence as it gets older. 3. Septicæmia is a putrefaction taking place in the blood of an animal, and induced by bacteria and vibriones. 4. Blood putrefied within the body is much less poisonous than that of an individual whose death has been caused by or who is still suffering from septicæmia, typhoid fever, or gangrene of the lung. 5. The one-millionth part of a drop of such blood injected into the cellular tissue of a rabbit will cause the death of the animal within twenty-four hours. 6. The poisonous quality of the blood is entirely due to the presence of bacteria.

Vulpian and Onimus contended against these conclusions; and subsequent experiments, especially those made by Billroth,* which excited universal attention, have tended to diminish the importance claimed for bacteria.

Billroth's experiments, which were chiefly clinical, were most thorough and extensive. He found in two hundred autopsies, of all diseases, coccobacteria present in eighty-seven in the pericardial liquid. The longer the interval between the time of death and the examination, and the higher the temperature of the air, the more certainly were these organisms found. Although they are found in abundance during life on many of the mucous membranes, it is probable that they make their way into the tissues and circulation only through the lungs, and that they remain, especially in the blood, in the form of germs capable of development.

Experiments made by Lewis and Cunningham, Calcutta, in 1874, upon dogs, showed large quantities of bacteria after the injection, not of a putrefying organic liquid, but of ammonia, into the peritoneal cavity.

We have thus endeavored to give some idea of the progress of investigation in this direction, but, of course, have been obliged to omit even the mention of numerous highly meritorious communications or monographs. The very recent literature of the subject is voluminous. Birch-Hirschfeld,‡ to whom we are very considerably indebted for the facts and discussions of the present part of our article, cites no fewer than eighty-six recent contributions, most of which have been published within the last two years; and one-half of these give the results of experiments upon pyæmia and septicæmia.

And yet, what exactly do we understand by these terms? In regard to this, Birch-Hirschfeld speaks nearly as follows:

"The names septicemia and pyemia are, by many authors, used almost as if synonymous, whilst others regard these affections as perfectly distinct. When, however, the exact line of division between them has to be defined, there is very little agreement. It is certainly true, as Virchow has demonstrated, that the morphological introduction of pus into the circulation does not result in pyemia, yet this affection is beyond doubt closely connected with suppuration. It must then be distinctly separated from the septicemia caused by putrid matter alone, and entirely unconnected with pus. Now, if it can be shown that in pyemia dependent upon suppuration the putrefaction of pus gave rise to the infection, it would certainly appear as if pyemia itself were only a species of septicemia.

"Another view, and one widely diffused, lays stress upon the occurrence of symptoms of embolic metastasis as a distinguishing point. When traumatic infection results fatally without the occurrence of metastatic emboli, the affection is termed septicemia; under the contrary circumstances, pyemia. This distinction will hardly, however, suit all cases."

We must confess that an examination of Birch-Hirschfeld's abstract of the various contributions to our knowledge of the influence of bacteria on pyæmia and septicæmia is at first not inspiriting.

The forty-odd investigators reach nearly as many conclusions, and we must admit, as does Birch-Hirschfeld himself, that their position on these points is certainly very contradictory. Indeed, there are very few assertions made which, after a careful review of all the authorities, are found entirely undisputed. If, at first sight, this position of affairs seems to the seeker after truth somewhat depressing, yet we must remember that much of this work is good work and genuine. It is work of research, and not mere speculation. We hold no axiom to be more eternally true than this: that good work always pays. These facts, which now seem so scattered, so contradictory, so impossible of assimilation, will one day be found parts of a plan which, as yet, we are unable to comprehend.

The hope must indeed be regarded as illusive, that in this department the object of research is to be attained without great difficulty. The processes concerned are of such a complex nature, and our methods in many respects so inadequate, that it is hardly to be expected we shall reach at this time results which shall be entirely unquestioned.

We cannot conclude this portion of our subject better than by quoting the opinion of one of the very greatest of living pathologists, Virchow.‡

Although these remarks of Virchow particularly relate to Billroth's work already alluded to, yet they are equally applicable in many respects to the subject in general. Virchow says, "Without venturing an opinion as regards the correctness of the botanical section of this admirable work [Billroth's "Coccobacteria Septica"], I must confess that it agrees only in part with my own preconceived ideas upon the subject. I certainly hold as correct the idea that the ordinary putrefactive germs are sufficient to explain a greater part of the local, as well as a certain portion of the

* Coccobacteria Septica, etc. Berlin, 1874.

† Die neueren pathologisch-anatomischen Untersuchungen über Vorkommen und Bedeutung niederer Pilzformen (Bakterien) bei Infectionskrankheiten. Schmidt's Jahrbücher, 1875, No. 5, p. 169.

‡ Vortrag über die Fortschritte der Kriegsheilkunde, etc., besonders im Gebiete der Infectionskrankheiten. Berlin, 1874. Reprint from Allg. milt.-ärztl. Ztg., 36, 41, 1874.

general, infectious diseases. This is that province which we have always conceded, of which the highest development is septicemia.

"The greater number of diphtheritic processes are comprised under this head, in regard to the affinity of which with putridity we have spoken long since. Their relationship is certainly closer than has been previously admitted,—indeed, closer than even Billroth is as yet inclined to admit."

Further, Virchow maintains, if pathological significance be attributed to parasitic plants, the identity of the various forms of miasma must be conceded, and it must also be admitted that this same miasma gives rise, according to the surroundings, to typhoid fever, dysentery, diphtheritis, hospital gangrene, or septicæmia. If, with Billroth, we look upon all these parasitic plants as mere vegetation-forms of coccobacteria septica, cholera may also be included here.

Only two explanations appear possible in this direction. Either the micro-organisms of all these disease-processes are identical, and it is necessary to assume poisonous substances in connection with the fungi and algæ yet distinct from these; or the micro-organisms are, *in spite of apparent similarities, different*, and form the carriers and exciters of the most serious processes in the body; they are in fact the peculiar causes of disease.

The rôle of the micro-organisms may again, under the latter view, be understood variously. Either these objects attack the living portions of the body directly, or they bring with them a poison which threatens life. This poison may either exist in the micro-organisms themselves, and they consequently be regarded as poisonous plants, or the putrefactive organisms are related to the putrid poison as the yeast-plant is to fermenting substances: they are ferments.

For the great infectious diseases, Virchow is inclined to the last-mentioned hypothesis. These distinct poisons are separable from the micro-organisms which have excited them.

It may easily be believed, therefore, that a mass of fungi (pilzheerde) may collect at a point of inoculation or of wounding in the human body, which may secrete poison the amount of which might be sufficient to put the whole body in jeopardy, without the fungus itself being taken up by the blood.

According to Panum's researches, septicæmia cannot be referred to *mechanical* disturbance by means of micro-organisms. It does not follow upon this, however, that the excitation of putrefactive poisoning is possible without the presence of putrefactive germs. *On the contrary, the more we investigate, the more evident it appears that it is indeed the organisms themselves which cause the mischief.*

In putrefactive processes the micro-organisms may easily be identified, and their influence upon the progress of decomposition may be conveniently observed. The difficulty of understanding the pathological significance of these processes would only be insuperable *if in fact a single plant* produced the various forms of putrefactive organisms. Here, however, practical research in regard to the physiological and pathological action of the disease-germs is decidedly in opposition to morphological research.

If these form-elements cause different effects, they themselves must be essentially different. We cannot, it is true, directly see these essential (innate) differences in such minute organisms; but we must remember that neither can we tell, from the germinative cells of the egg, numerous pathological growths, etc., what may come out of these. If it happens by inoculation that through bacteria which resemble those of the usual putrid infusions malignant pustule arises, while the bacteria of the usual putrid infusions do not cause this, then we must conclude that the bacteria of malignant pustule must be at least as different from those of infusions as hemlock from parsley.

So much for the influence of bacteria in the production of pyæmia and septicæmia. In the third and concluding portion of this article we shall examine the present state of knowledge respecting the production of other affections by the agency of the lower organisms.

## CORRESPONDENCE.

NEW YORK, August 20, 1875.

TO THE EDITOR OF THE PHILADELPHIA MEDICAL TIMES:

DR. ERSKINE MASON, who has been especially interested in the subject of intestinal obstruction, and has performed a number of operations for its relief, recently operated in a case of carcinoma of the rectum. The fæces passed had been gradually becoming more and more attenuated, until they ceased altogether to come away, the bowel being entirely occluded. The lower portion of the cancerous mass could be felt by the finger about one and a half inches within the anus. A number of well-known surgeons were present at the operation, which was performed at Roosevelt Hospital, where Dr. Mason is one of the attending surgeons, and which was that of lumbar colotomy, for the purpose of establishing an artificial anus. The patient rallied well after it, and the procedure will, no doubt, prolong her life for some time; though the disease is steadily advancing, and has now involved the uterus to some extent.

Just at the conclusion of the operation, Prof. Alonzo Clark walked into the amphitheatre, and was politely asked by Dr. Mason if he would not like to make a digital examination of the diseased parts. The old gentleman, looking around complacently on the others present, some of whom were still lugubriously sniffing their fore-fingers, from which soap and water had been quite ineffectual in removing the disgusting odor, replied, in the driest possible manner, "No, I thank you, doctor; I am quite willing to take the word of my friends here."

The third annual report of the visiting committee for Bellevue and other public hospitals of New York to the

State Charities Aid Association, for the year ending February 1, 1875, has been published, and contains much that is interesting.

We have only time, however, to glance at a few points in the report of the committee on the Training School for Nurses at Bellevue Hospital, which is contained within the other. The school has been in operation for two years now, and seems to have more than fulfilled the expectations entertained in regard to it in the beginning. "The most conscientious and most intelligent of our nurses prove our most cheerful workers," says the report. "They fully realize that there is no such school for a wide and varied experience as just such a hospital affords. They appreciate very highly the bedside instruction kindly and constantly given by the physicians and house staff, and they know that the profession they are acquiring by persevering work in the wards will be, in their future lives, as lucrative as it is useful and womanly."

During the past year the number of wards under their charge was increased from five to nine,—now comprising three female medical, three female surgical, and three male surgical. "The fact that these four new wards," continues the report, "were urged upon our acceptance by the physicians in charge, who have watched the work of the school in the hospital from its commencement, would seem to prove their approbation of its results, and their appreciation of the difference between the services of intelligent women striving day by day to perfect themselves in a deliberately chosen profession, and the labors of the uneducated and often overworked nurses who have charge of the wards outside of the school."

The number of pupils has increased to such an extent that the house rented in Twenty-sixth Street near the hospital for the nurses' home will no longer accommodate them, and it has been found necessary to occupy a portion of the house adjoining also.

During the year one hundred and seventeen applications for admission to the school were received, either personally or through letter. "In many cases," says the committee, "the applicants fell below our standard, mentally or physically, or were prevented by domestic reasons from binding themselves to any given length of service. But generally the two years that we demand from our probationers is the stumbling-block. The thoroughness to be learned by one year's faithful work in the wards and a second year spent in training others, thus gaining the valuable experience only possible to acquire by putting knowledge to the practical test of use, counts as nothing with most American women; and it is this contentment with a superficial rather than with a thorough education that has so far proved one of our chief troubles."

Of the one hundred and seventeen applicants, twenty-nine were accepted. At the close of their month of probation, nine left,—five as entirely unfitted for the work, one as unwilling to do night duty, two for want of health, and one because she could not live apart from her family. One of the pupils who entered the school in 1873 was dismissed, two broke their written pledges and left, and one is now superintendent of the Boston Training School.

As long as there were lying-in wards at Bellevue, the school had charge of them; but last summer, on account of the continued prevalence of puerperal fever, the obstetric service was entirely transferred to Charity Hospital.

In December, at the request of the committee, Drs. Bryan and Murray, of the house staff, held an examination of such of the women as had been in the school one year or over, and made the following report upon it: "According to request, we have examined the head nurses, asking them such questions as would give us a fair estimate of their knowledge of nursing. Supposing 100 to represent perfection, and 75 the lowest mark a nurse could have and pass, we have marked them as follows: 1, 99; 2, 98; 2, 97; 5, 95; 1, 93; 1, 90; 1, 88; 1, 85. As our marking plainly indicates, we have found them all well informed on the subject of nursing, considered theoretically; practically, we have had personal experience with all of them, and can say from actual knowledge that each one is thoroughly competent to take charge and perform all the duties of either a surgical or medical ward."

The Medical Board of Bellevue, composed of the attending physicians and surgeons, also passed a formal resolution expressing their appreciation of the improvement in the care of the sick and injured in the wards of the hospital under the "trained nurses," and their approval of the efforts of the managers of the school, in the success of which they believe that not only the hospital will be benefited, but also that facilities will be offered to the public for procuring competent private nurses. These, indeed, were the two great aims which the managers had in establishing the school: first, to make this great hospital a place where the respectable poor could be tenderly and skilfully nursed, and where even the most degraded of paupers would be sure of kindly and patient care; second, the training yearly of a band of experienced, obedient, devoted nurses for service in private cases, or among the poor.

During their second year such of the women as the superintendent can best spare from their work of training probationers are sent out to private cases, and in the year past twelve of the nurses were thus employed. In the hospital, each ward under charge of the school is worked by one head nurse, who receives sixteen dollars a month wages, and two probationers, each of whom receives ten dollars.

Since February, 1873, the school has received nearly twenty-five thousand dollars; but its annual expenses now amount to about twelve thousand dollars. During the past year the following lectures were given: "On Food for Children, and the Care of the New-Born," by Dr. Beverly Robinson; "The Eye," by Dr. R. H. Derby; "Fresh Air, Emergencies, Digestion, and Food," by Dr. Allan McL. Hamilton; "Testing Urine," by Dr. Ordronaux; "The Circulation," by Dr. Farrington; "Surgical Instruments, Preparations for Opera-

tions, Erysipelas, Gangrene, and Pyæmia," by Dr. Frank Hamilton; "Bandaging," by Dr. Brooks; "Symptoms of Disease, Puerperal Women, etc.," by Dr. Murray; and "Medicines, Inflammation, Hemorrhages, etc.," by Dr. Bryan.

At Charity Hospital a number of judicious and much-needed reforms have recently been instituted, which have been productive of great advantage to it; but a great deal still remains to be done. Thus, there are not infrequently deficiencies in bedding, clothing, medicines, instruments, appliances for nursing, and daily food, such as beef, mutton, and milk, which are attributable neither to negligence on the part of the Medical Board nor to the Warden or Chief of Staff, but to the "Medical Inspector," to whom all requisitions go, and who is vested with the privilege of cutting them down or striking them off altogether, without being required to visit the institution from which the demand comes, in order to investigate its necessities, or to state the reasons for his action either to the official making the requisition or to the Commissioners of Charities. It is claimed that a medical inspector is indispensable; but the inspector should not be an autocrat, responsible to no one, and valued solely for his skill in cutting down supplies, for his economical measures necessarily recommend themselves to his superiors, who seem to regard him as a most valuable check upon the supposed extravagance of the physicians and hospital officials.

This same false system of economy, we learn, is seen in the regulation of the water-supply. The Croton water is brought to the hospital, and the inmates are entitled by law to the use of eighty gallons a day each; but to force such an amount of water through the building would demand the use of more fuel than is authorized, and consequently there is often foul air from the closets in every ward, and the whole hospital thus tainted. Another great abuse is the necessary overcrowding of the wards at times. Thus, during last winter one ward with thirty-four beds contained forty-one patients; another, with thirty-two beds, fifty patients; and a third, with twenty-eight beds, forty-four patients.

On the 1st of August a training-school for nurses, entirely independent of that at Bellevue, though on the same general plan, was inaugurated at Charity Hospital. It is under the direction of the Commissioners of Charities and Correction, and it is the design of its originators that it shall afford a thorough course of instruction, both theoretical and practical. The age of the applicants must be between twenty and thirty-five years, and none but those of irreproachable character and sound constitution are allowed to enter. After a pupil is once admitted to the school, the attendance for the full time is compulsory, unless it should become necessary to dismiss her. The wages are to be ten dollars a month for the first year, and fifteen dollars for the second. The course of instruction is limited to two years, at the end of which time those who are found thoroughly competent will be presented with a diploma, testifying to their experience and formally qualifying them for their calling, which is to be signed by the Medical Examining Committee and the Commissioners of Charities and Correction. During August and September lectures are to be given on "Nursing," by Dr. D. H. Kitchen; "Midwifery," by Dr. W. R. Gillette; "Physiology," by Dr. L. M. Yale; "Surgical Dressings," by Dr. J. W. Howe; "Examination of Urine," by Dr. H. G. Piffard; "Hygiene," by Dr. E. Frankel; "Care of Children," by Dr. J. H. Ripley; "Food," by Dr. Pallen; and "Poisons and Antidotes," by Dr. Drake.

In a communication on the water-supply of New York, addressed to Mayor Wickham this summer by Gen. Fitz-John Porter, Commissioner of Public Works, there is a good deal of information of importance to the public; and, as the furnishing of large cities with an abundant quantity of pure and wholesome water can never be a subject of indifference to the medical profession, perhaps it may be well to devote a little space to some of the details mentioned. The area of land which drains into the Croton River above the Croton dam, which supplies the water to this city, is about three hundred and forty square miles, which, according to the record of rainfall, will give an average daily supply of water from rain alone throughout the year of three hundred million gallons. A gauge for many years of the daily quantity of water flowing over the Croton dam, in addition to that which is conveyed into the city by the aqueduct, shows for the past ten years an average daily waste of water of three hundred and forty million gallons.

It is thus manifest that many of the large springs within the Croton basin receive their supply from sources outside of the water-shed, and that a much larger supply can be relied upon, if properly stored, than is shown by calculations from the average rainfall. The Croton Lake (the sedimentary basin of the water-supply), at the head of the aqueduct leading to this city, covers about four hundred acres, and has a storage-capacity (above a level that will allow the delivery daily of 35,000,000 gallons) of about 500,000,000 gallons; the new reservoir in Central Park, 1,000,000,000 gallons; the old reservoir in Central Park, 150,000,000 gallons; distributing reservoir in Fifth Avenue, 20,000,000 gallons: total, 1,670,000,000 gallons. Yet on the 2d of October, 1869, all of this available storage-supply was practically exhausted, and the only supply was an amount not exceeding 27,000 gallons per day, then running in the Croton River. But for the early partial closing of the valves at the reservoirs and in the city, the higher parts of New York would have been entirely without water, and the lower parts scantily supplied.

In Putnam County, at or near the sources of many of the tributaries of the river, are natural lakes, generally of great depth, the waters of which, coming from springs within their basins or near by, are remarkably pure and limpid. These afforded the only immediate means of obtaining a full and adequate supply of water for the city, and in 1870 the right to draw from a number of them was secured, and the outlets cut down.

Thus an ample supply of wholesome water was furnished to the city during the long drought of 1870, notwithstanding it was much more severe than in 1869. It is manifest that if the rains were frequent and evenly distributed throughout the year, there would be a large and constant supply of water; but the long droughts of summer and autumn, and, occasionally, the severe cold of winter, so reduce the quantity running in the river as to make it inadequate to supply the daily needs of the city.

Necessity has therefore compelled the resort to storage-reservoirs, the system of which had been commenced at Boyd's Corner as early as 1866, these reservoirs being filled during the wet season and drawn from during the dry season. The lakes, the waters of which are available in case of necessity, are Glenida, Gilead, Mahopac, Kirk, Barrett, and China, furnishing a total supply of 2,006,000,000 gallons.

*Artificial Reservoirs.*—Reservoir at Boyd's Corner (finished), 2,700,000,000 gallons; new reservoir on middle branch of Croton River (unfinished), 4,000,000,000 gallons.

In 1869, careful husbanding of the water in the city reservoirs alone saved a large part of the city from water famine.

In 1870, prudent forethought saved the city from stint and secured an abundant supply from the natural lakes and ponds.

In 1873, over one-thirteenth of the year's supply was drawn from three of the lakes and from Boyd's Corner Reservoir, and this draught was during the dry season, and when the daily consumption was 100,000,000 gallons.

In 1874, with a daily consumption of 102,000,000 gallons, one lake and Boyd's Corner Reservoir supplied one-nineteenth of the year's consumption.

In 1875, up to June 5, the daily consumption has averaged 107,000,000 gallons. At that date the Croton Lake was unusually low, and the reserve supply was running into it.

The daily consumption of water has been steadily increasing, year by year, as follows: Average daily consumption in 1870, 85,000,000 gallons; average daily consumption in 1871, 87,000,000; average daily consumption in 1872, 90,000,000; average daily consumption in 1873, 100,000,000; average daily consumption in 1874, 102,000,000; average for five months of 1875, 107,000,000.

The aqueduct is now used very nearly to its full capacity, and with the growth of the city, and the increased facilities for distributing water at higher elevations, the rate of consumption and waste will, no doubt, be proportionally greater each year, and soon the demand for water will exceed the capacity of the present aqueduct to deliver, and the city will be stinted in supply.

A year with the drought that occurred in 1870, with the consumption of the present time, would require a storage-capacity of 4,023,200,000 gallons.

The Chief Engineer very justly says that "it is evident that, in spite of all the restrictions that can be brought to bear against the waste of water, it will be necessary to build an additional aqueduct from Croton River to Harlem River. An abundance of water for the city's wants for many years to come can be had in the Croton Valley by establishing storage-reservoirs, for which the Croton and its branches offer many admirable sites.

"But to increase the supply of water to any considerable extent involves the construction of a new aqueduct, and I think no time should be lost in obtaining all the requisite data to locate it."

The excursions of the new floating hospital of St. John's Guild have been continued with great success; though, as the average expenses of each trip are about two hundred and fifty dollars, and they are made three times a week, it is a pretty severe drain on the treasury. About a thousand mothers and children go on every excursion, and both breakfast and dinner are always served on board. Some idea of the quantity of food consumed on these excursions may be obtained from the following list of the principal articles used on one of the ordinary trips: 611 pounds of beef, 250 loaves of bread, 3 barrels of crackers, 350 quarts of milk, 1 tub of butter, 1½ barrels of boiled rice, ½ barrel of sugar, 80 gallons of beef soup, and ¼ chest of Oolong tea.

Another excellent summer institution is the "Poor Children's Seaside Home," at Bath, Long Island. This has been provided by the Children's Aid Society for the pupils of the industrial schools under their care, and the location is unsurpassed for pleasant surroundings, invigorating sea air, and safe bathing-grounds. Over two hundred children are at the home every week, and it is hoped that two thousand will be able to enjoy its benefits before the season is ended. This pleasant place is only four miles from Brooklyn, and is very accessible both by cars and boat.

PERTINAX.

## PROCEEDINGS OF SOCIETIES.

### PATHOLOGICAL SOCIETY OF NEW YORK.

STATED MEETING, MARCH 10, 1875.

DR. JANEWAY presented a specimen of *urethral calculus* from a boy four years of age. The doctor stated that when called in to see the child he found him suffering much pain from suppression of urine; not a drop had passed for two days. The bladder consequently was greatly enlarged. On opening the meatus, he noticed lodged in the urethra a small calculus, which he succeeded in extracting. The calculus was egg-shaped, three-quarters of an inch long, one-quarter inch thick, and composed of uric acid.

The doctor also presented specimens of bone obtained from the dissecting-room. The first was an impacted fracture of the neck of the femur, showing the new growth of bone around the shaft.

The second specimen was an anchylosed knee-joint, which illustrated very well the disease of bony anchylosis at the knee. The third specimen was taken from a woman aged 35, and was characterized by growths of exostosis. All of her bones were similarly affected.

Dr. MASON showed a specimen of *fracture at the base of the skull*, which was taken from a man aged 30. On admission to the Bellevue Hospital in December last, he presented the appearance of one seriously intoxicated. His breathing for a short time was stertorous. No marks of injury were found. A small clot of blood was found in the ears, but no other fluid was discharged from them. The night he came into the hospital he vomited, and three days after admission he vomited again; the matter vomited each time smelling strongly of alcohol. Five days after admission there was no material change in his condition, except that he appeared to be growing weaker, and complained of some pain in his head. On the sixth day after admission the patient became quite delirious. On the eighth day pupil of left eye more dilated than the right; both, however, responded to light. Some paralysis of left side was inferred from the fact that he could not grasp so strongly with left hand. At this time pulse 104, temperature 101°, respiration 20. On the following day, ninth after admission, all his symptoms much improved, but on the next day he for the first time gave evidence of what his real condition was by a watery discharge from his ears. Diagnosis was then made that the patient probably had fracture of the base of the skull.

On the twelfth day he became comatose, and began to pass his fæces and urine involuntarily. He died on the sixteenth day after admission.

At the autopsy, twenty-four hours after death, on removing the skull-cap, the dura mater was found adherent to the bone, and the sinuses greatly distended with blood. In the middle lobe of the cerebrum on the left side there was a spot of softening two and a half inches in diameter and one inch in depth. On removing the brain an extensive fracture was noticed through the temporal and ethmoid bones.

The point of interest in this case is that the patient with such an extensive fracture in such a situation should present no symptoms of his real condition until at least ten days had passed after the injury was received.

Dr. KIPP presented a specimen of *cancerous disease of the petrous portion of the temporal bone*, taken from a woman aged 47. The specimen was referred to the microscopic committee, to be examined.

Dr. J. LEWIS SMITH said he was called, on February 27, to see a baby, at that time seven days old, which had been sick since the day previous. The family lived in a dilapidated tenement-house in the suburbs of the city. There was no difficulty in determining the nature of the disease. The child had tetanus neonatorum fully developed. A year previously, this family, then living in the same apartments, lost a child from the same disease. The only thing observed unusual in the case up to the time of tetanic symptoms was the existence of a diarrhœa, which the child had had since two days old. At the time of the doctor's visit, the spasms were occurring about every two minutes. Pulse 164, temperature 100¼°, respiration 60. During the spasms the muscular rigidity was so great that the body could be lifted up by placing one hand under the child's head and the other under its heels.

The doctor then described the post-mortem appearances, thirty-seven hours after death, the most remarkable of which were the hyperæmic condition of the liver and the brownish discoloration of the surface of the abdomen, showing the existence of *icterus neonatorum*.

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BULLET-WOUND OF THE STOMACH AND KIDNEY (*Boston Medical and Surgical Journal*, August 5, 1875).—Dr. M. E. Jones reports a case of bullet-wound of the stomach and kidney followed by hæmatemesis and hæmaturia. Morphia and gallic acid were employed, and the patient made a good recovery.

## SELECTIONS.

A RAPID METHOD OF ASSAY FOR CINCHONA-BARKS.—M. Urbelin, a pharmacist of Nantes, proposes the following rapid method of assay for cinchona-barks: 10 grammes of bark reduced to a coarse powder are moistened with about 30 grammes of water of ammonia; after stirring the mixture to facilitate the penetration of the ammonia into the pores of the bark, about 30 grammes of benzole are poured upon the pasty mass. The mixture is agitated, and after a few minutes the benzole is decanted into a flask, holding about 200 c.c. This operation is renewed four or five times, or until the quinia is completely removed. Into the benzole are poured about 50 grammes of water, containing 2.5 grammes of sulphuric acid; after agitation for a few minutes, the quinia passes from its solution in the benzole into the acid, where it exists as sulphate. The acid liquid is removed from the benzole by decantation, and to it is added a quantity of ammonia-water sufficient to precipitate the quinia, which is separated by filtration, and weighed, after being carefully dried.—*The Laboratory*.

MENINGEAL SYMPTOMS PRODUCED BY QUINIA (*The Clinic*, July 31, 1875).—Dr. Cleveland relates that he was called to attend a case of remittent fever in a boy 14 years of age. He treated it in the usual manner, but, the fever persisting, increased the amount of quinia until he gave four-grain doses. The fever then subsided, but he was shortly afterwards summoned, and found the patient evidently in a state of great cerebral excitement, if not of meningitis. The orbital pains of which the boy had complained had very much increased; the circumscribed pain became a general headache. As it occurred to him that the quinia might have produced the trouble, he discontinued it. The meningeal symptoms subsided in four or five hours. The temperature of the patient had once been as high as 105°, but while in the state mentioned it did not exceed 101°. During the height of the fever the pulse was 120; in the period of cerebral excitement it fell as low as 50 beats per minute. About two scruples had been given, the greater part of it during the twelve hours preceding the development of the meningeal symptoms.

## GLEANINGS FROM OUR EXCHANGES.

METASTASIS OF MUMPS TO THE TESTES AND THE BRAIN (*The Boston Medical and Surgical Journal*, June 24, 1875).—Dr. O. B. Shreve reports the case of a young man, æt. 25, who had an attack of mumps, declaring itself by headache, loss of appetite, moderate fever, slight acceleration of the pulse, and swelling of the parotid glands and the tissues in their neighborhood. Two days later he underwent exposure to cold and wet, which was followed by a high fever, with full bounding pulse, furred tongue, pupils dilated, headache, delirium, subsidence of parotid swelling, and turgescence and pain in the testes. In a few days he was perfectly rational, and was much better in every way, the pain and swelling both in the parotid region and in the testes having disappeared. He was, however, suddenly taken with raging delirium which was entirely uncontrollable; pulse 120, face and eyes congested, pupils contracted. These severe attacks were ushered in by a sudden rigidity of all the muscles of the body, and followed by distinct opisthotonos, which was succeeded by violent struggles, during which he attempted to bite, kick, or strike his attendants, and failing in this he gave utterance to the most fearful

shrieks. He became so violent, and was possessed of such great strength, that it became necessary to confine him by a strait-jacket. Bromide and chloral seemed to have no effect on him, although administered in large doses; the pulse became weak, the body was bathed with perspiration, and the patient died comatose.

QUININE AS A GARGLE (*The Practitioner*, August, 1875).—Dr. David J. Brakenridge has for four months treated all suitable cases of sore throat occurring in his practice with a gargle composed of ten grains of sulphate of quinia and five minims of dilute sulphuric acid to each ounce of water. From a considerable experience he draws the following conclusions:

Simple non-syphilitic ulcers of the throat under this treatment at once assume a healthier aspect, and heal rapidly. In syphilitic ulcers, the local treatment has always been accompanied by the internal administration of iodide of potassium or some other constitutional remedy; but the cure was apparently hastened by the quinine gargle. Its effect on the sore throat of scarlatina is very marked, the pultaceous secretion being checked and the inflammatory swelling diminished.

It is of comparatively little use in the early stage of cynanche tonsillaris, over which tincture of aconite, in minim doses frequently repeated, has so decided a control. When, however, abscess followed by abundant discharge of pus results, its beneficial influence in checking the suppuration and promoting healing is marked.

In the slighter forms of diphtheritic sore throat it answers admirably, preventing the extension of the disease and promoting the separation of the membranous exudation.

Dr. Brakenridge reports a very severe case of true diphtheria in which the gargle had a remarkably beneficial effect, and says that it is in such cases that he hopes it will prove most useful.

GELSEMINUM SEMPERVIRENS IN ODONTALGIA (*The Practitioner*, August, 1875).—Dr. James Sawyer has rarely found gelseminum fail to give decided and lasting relief in cases of neuralgic pains in the face and jaws associated with carious teeth. He usually gives every six hours fifteen minims of a tincture made in the following manner: Take of gelsemia root, in coarse powder, two ounces; of rectified spirit, twenty fluid-ounces. Moisten the powdered root with ten ounces of the spirit, and allow the mixture to stand for twenty-four hours. At the end of that time pack in a percolator, and add the remaining ten ounces of spirit. When the fluid has ceased to flow, remove the contents of the percolator and press them. Add the pressed liquid to that obtained by percolation, filter, and make up with rectified spirit to a pint. Eleven minims are equal to one grain of the root. There is only a trace of tannin in the tincture, which may be given with any of the preparations of iron.

TREATMENT OF VAGINISM (*The Practitioner*, August, 1875).—M. Bouchut observes that the spasm of the vaginal sphincter in this affection is often due to the same cause as the spasm of the anal sphincter,—a very small, painful, longitudinal fissure being detectable at the lower part of the orifice of the vagina. Forced dilatation would seem to be indicated here as in the fissure of the anus; but before having recourse in either disease to so painful a procedure, we should try simple measures, which will often prove efficacious. To this end M. Bouchut strongly recommends vaginal suppositories, formed of five parts of cacao-butter and three parts of extract of rhatany, thoroughly well incorporated. One of these is to be introduced into the vagina night and morning, and allowed to dissolve; then a bran-bath should also be employed for an hour daily.

DAMIANA (*Pacific Medical and Surgical Journal*, July, 1875).—Dr. Charles M'Questin, having used damiana extensively in Mexico, where it is employed as a domestic medicine, bears testimony to its efficacy in cases of sexual debility or lethargy of the sexual organs. In such cases the results are all that could be desired. The leaves only of the plant are used. An infusion is made of one ounce of the dried leaves to a pint of water, and this amount is given daily. In a few days the effects are manifest. The infusion has an agreeable aromatic and slightly bitter taste. He is not prepared to state if its properties are those of an aromatic or stimulating tonic, but says that of its aphrodisiac power there can be no question.

APHASIA (*The Chicago Medical Journal*, August, 1875).—Dr. Walter Hay reports a case of aphasia following a blow upon the bridge of the nose,—the immediate sequelæ of the blow, coma and paralysis, having entirely disappeared, but the aphasic condition persisting to such an extent that his speech is limited to one word, "yes," which he articulates distinctly, but in a whisper. His general health is excellent.

In another case, the attack seemed to follow embolism of the left middle cerebral artery, from rheumatic endocarditis, the most remarkable feature being the total and instantaneous obliteration from memory of certain items of acquired knowledge previously in constant use.

CARBOLIC ACID AS A LOCAL ANÆSTHETIC (*Atlanta Medical and Surgical Journal*, July, 1875).—Dr. Eugene Foster asserts, from experience in its use, that carbolic acid is almost worthless as a local anæsthetic; that if complete anæsthesia of a part is obtained, death of the tissues to the extent of the depth of the anæsthesia almost invariably follows; that it is by no means certain to produce anæsthesia, but that it is merely an experiment in each instance in which it is used; that cicatrization of the incision is greatly retarded by the acid; and that in comparison with the ice and salt mixture, ether, or chloroform, as a local anæsthetic, it sinks into utter insignificance.

INCISION OF THE LOWER LID IN CERTAIN CASES OF CATARACT (*The Lancet*, July 31).—Mr. Solomon, in a case of cataract where the eye was so deep-set as to interfere with the section of the cornea during the operation of extraction, simply made a perpendicular incision through the substance of the lower lid of about three-eighths of an inch in length and one-sixth of an inch from the commissure. The front of the eye was now easy of access, and the operation was performed. The tarsal wound was entirely healed on the fourteenth day.

XANTHIUM STRUMARIUM (*The American Medical Journal*, July, 1875).—Dr. William Fulton reports the xanthium strumarium, or common cockle-bur, as one of the most reliable of diuretics. He has found it a specific in all cases of urinary difficulties in pregnancy, and prescribes it in all cases where there is scalding in urinating. He uses it in the form of a tea, or as a saturated tincture, of which he adds about two drachms to a tumbler of water, and gives one tablespoonful every two or three hours.

NECROMETER.—Bouchut found by examination of 1100 men (living, dead, and in a trance) that no corpse has a higher temperature than 20° Cent. (68° Fahr.). He constructed a thermometer (alcohol) in such a way that the alcohol does not become visible before 20° Cent. has been reached. Even a child will be able to tell whether life be extinct or not.—*Am. Jour. Phar.*, July, 1875; from *Arch. f. Pharm.*, May, 1875.

CAUSE OF URETHRAL STRICTURE (*New York Medical Journal*, August, 1875).—M. Oudenhouven, chief health officer of the Dutch marine, has observed that among the Japanese, Malays, and Chinese strictures are very rare, notwithstanding the frequency of blennorrhagia, and he attributes this fact to their peculiar form of dress, which necessitates the performance of micturition in the sitting posture, a position which diminishes the curve of the urethra and frees the genitals and urethral canal from all compression. Among Europeans, on the contrary, the pantaloons cause an augmentation of the curvature and a compression of the canal; micturition, therefore, requires more effort, and the urine produces more friction of the urethral walls; the epithelium is eroded, the inflammation is deeper, and granulation-tissue forms. Oudenhoven, therefore, recommends that all patients with urethritis should be advised to urinate while in the sitting posture.

## MISCELLANY.

HOMŒOPATHIC HOSPITAL.—It is reported in the daily papers that the Commissioners of Public Charities and Correction voted, on the 7th [ult.], to place the building heretofore used as an Inebriate Asylum on Ward's Island, under the charge of homœopathic physicians and surgeons, to be used as a general hospital. The following preamble and resolutions were passed accordingly:

"*Whereas*, More than six months ago an appeal was made to the Board by six hundred and fifty-five citizens and tax-payers to designate an hospital to be under the care of homœopathic physicians; and,

"*Whereas*, The resolution of this Board, passed February 13, conditionally assigning the Riverside Hospital for the purpose, has proved inoperative by reason of the continued occupancy of that building by the Board of Health; therefore,

"*Resolved*, That that portion of the Inebriate Asylum on Ward's Island made vacant by the distribution of the soldiers to national homes be set apart for a hospital, to be under the care of homœopathic physicians, under such rules and regulations as the Commissioners of Public Charities and Correction may establish.

"*Resolved*, That the Committee of the Homœopathic Society, whose petition in this behalf bears date July 3, 1875, and was followed by a personal interview with the Commissioners on the 13th of July, be notified of this action of the Board, and requested to make such suggestions and recommendations as may seem to them calculated to promote the object in view."—*The Medical Record.*

SAD AFFLICTION.—A London physician has a case without precedent, the cause of which he is unable to discover, and which baffles all his skill. Naturally he writes to the *Lancet* about it. The case is this, as he states it:

"Mrs. J——, aged thirty-five, with a large family, suffers from a spasmodic affection of the lower jaw. It will, without any warning whatever, become fixed, so that with all my strength I could not open it. The husband is the only one who can do so; and I have seen him perspire before he succeeded."

The physician says he has tried everything he can think of, both internally and externally, but all in vain. It *is* a very remarkable case; one of the most remarkable we ever heard of. There have been cases, we are told, quite the reverse of this, as, for instance, when a woman "with a large family" has "a spasmodic affection of the lower jaw," which, "without any warning whatever," becomes *un*fixed and vibratory, so that the strength of the whole family cannot shut it or stop it, and even the husband, perspire he never so freely, is compelled to flee before it. We do not, of course, profess to be able to prescribe for the London patient, but would it not be possible to make a "swap" of the two spasmodic affections? There are, no doubt, many men who would be willing to exchange the spasmodic affection which unfixes the wife's lower jaw for Mrs. J.'s disease, which fixes it. Doubtless, too, there are husbands who, if their wives were overtaken by a spasmodic affection fixing the lower jaw so that it could not be opened without perspiration, would never sweat again. —*Druggist's Journal.*

IN a letter dated Vienna, July 24, 1875, the writer speaks as follows of a recent operation for ovariotomy:

"Billroth's last case, operated on just a week ago, was one of the most difficult and most unpleasant an operator could well meet, the adhesions being far greater than had been anticipated. Omentum, intestines, ovaries, and uterus were so bound together that a great part of the peritoneum was torn away in efforts made to disengage the tumor, which proved to be a multilocular cyst. The adhesions in the pelvis were so numerous that the uterus could not be found, and no drainage-tube could be used to any advantage. The tumor appeared to be nourished not through any distinct pedicle, but through its numerous adhesions, which gave rise to a hemorrhage which was very difficult to control. It was finally stopped by numerous ligatures, all of which were left in the abdominal cavity. As might be supposed, the patient died—in forty-eight hours."

A PHYSICIAN'S certificate, lately presented to an agent of the Southern Express Company, with a corpse for transportation, read as follows:

"I hereby certify that this corps, a daughter of ——, died of croup. ——— ——, M.D.

"MAY 10, 1875."

If this physician cannot write Latin better than he can write English, we shouldn't like to take a mixture compounded from any prescription of his.—*The Sanitarian.*

## OFFICIAL LIST

*OF CHANGES OF STATIONS AND DUTIES OF OFFICERS OF THE MEDICAL DEPARTMENT U.S. ARMY FROM AUGUST 24, 1875, TO AUGUST 30, 1875, INCLUSIVE.*

HALL, J. D., ASSISTANT-SURGEON.—When relieved by Assistant-Surgeon Brown, to comply with par. 3, S. O. 135, c. s., War Department. S. O. 146, c. s., Department of Dakota.

BROWN, P. R., ASSISTANT-SURGEON.—Assigned to duty at Fort Shaw, M. T. S. O. 146, c. s., Department of Dakota.